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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,017	08/20/2003	Richard Guzman		6940
23364	7590	03/24/2005		EXAMINER
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			NOVOSAD, CHRISTOPHER J	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/644,017	GUZMAN ET AL.
Examiner	Art Unit	
Christopher J. Novosad	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 January 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Claims 8-13 have been canceled.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 1 (Currently Amended) is rejected under 35 U.S.C. 103(a) as being unpatentable over Kinkead *et al.* in view of Rogers and Strid, newly applied.

With respect to claim 1, Kinkead *et al.* show a method of improving turf conditions to improve plant growth over a specified area of soil, comprising the steps of:

aerating the soil of the specified area by punching uniform holes via 312,316 in a uniform pattern in the area;

applying a selected granular aggregate over the area to at least partially fill the aerating uniform holes using a vehicle which dispenses the selected granular aggregate uniformly;

applying soil amendments over the area using a vehicle which dispenses the soil amendments uniformly; and

smoothing the area using member 318 to even the distribution of the applied selected granular aggregate (seed) and cause the surface of the area to have a smooth appearance.

Claim 1 distinguishes over Kinkead *et al.* in requiring a drag mat to be used for the smoothing step.

Rogers discloses that a “drag or other attachment may be towed behind the discs 26 if desired to help fill the trenches 78 with dirt” in col. 4, lines 57-59.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a drag, as disclosed in Rogers, in place of the brush 318 of Kinkead *et al.* for greater and more uniform smoothing.

Claim 1 further distinguishes over Kinkead *et al.* in requiring that the holes punched in aerating the soil in the first step of the method be “of a given diameter and depth.”

Strid, newly applied, discloses a method of cutting soil plugs and thereby aerating the soil by means of conventional tubular or cylindrical digger elements 46 (Fig. 2, col. 3, lines 50-54) mounted on a rotatable drum-like member 20.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted tubular or cylindrical digger elements, as disclosed in Strid, in place of the tapered spikes 316 of Kinkead *et al.* for punching holes in the soil “of a given diameter and depth,” as now recited in claim 1, to expose more of the surface area of the soil to subsequent treatment.

Claim 2 is rejected under 35 U.S.C. 103(a) as unpatentable over Kinkead *et al.* in view of Rogers and Strid, as applied to claim 1 above, and further in view of Paige *et al.*

Claim 2 distinguishes over Kinkead *et al.* in view of Rogers and Strid, as applied to claim 1 above, in requiring the additional step of moistening the area with water before aerating the soil.

Paige *et al.* disclose “watering” in col. 1, line 8 and “spray pipes 27 having nozzles 28 at the forward ends thereof” in col. 5, lines 14 and 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have moistened the area with water as shown in Paige *et al.* before aerating the soil with the apparatus of Kinkead *et al.* for improving soil manageability.

Claim 4 is rejected under 35 U.S.C. 103(a) as unpatentable over Kinkead *et al.* in view of Rogers, Strid and Paige *et al.*, as applied to claim 2 above, and further in view of Cole *et al.* Kinkead *et al.*, as modified above, show the method as noted.

Claim 4 distinguishes over Kinkead *et al.*, as modified above, in requiring the soil amendments to include compost.

Cole *et al.* disclose in col. 1, lines 15 and 16, "compost, which is especially useful as a soil amendment."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized compost as a soil amendment in the method of Kinkead *et al.*, as disclosed in Cole *et al.*, for economy and for soil improvement.

Claim 5 is rejected under 35 U.S.C. 103(a) as unpatentable over Kinkead *et al.* in view of Rogers, Strid and Paige *et al.*, as applied to claim 2 above, and further in view of Palmer.

Kinkead *et al.* show the method as noted.

Claim 5 distinguishes over Kinkead *et al.*, as modified above, in requiring the soil amendments to include fertilizer.

Palmer discloses in col. 1, line 52 "soil amendment including fertilizers."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized fertilizer as a soil amendment, as disclosed in Palmer, in the method of Kinkead *et al.* as modified above, for economy and for soil improvement.

Claim 6 is rejected under 35 U.S.C. 103(a) as unpatentable over Kinkead *et al.* in view of Rogers, Strid and Paige *et al.*, as applied to claim 2 above, and further in view of Cole et al. and Palmer.

Claim 6 distinguishes over Kinkead *et al.*, as modified above, in requiring the soil amendments to “include compost and fertilizer.”

Cole et al. discloses in col. 1, lines 15 and 16, “compost, which is especially useful as a soil amendment” and Palmer discloses in col. 1, line 52, “soil amendment including fertilizers.”

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized “compost and fertilizer,” as soil amendments in the method of Kinkead et al. as modified above, in view of the further teachings noted above in Cole et al. and Palmer, respectively, for economy and for soil improvement.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kinkead *et al.* in view of Rogers and Strid, as applied to claim 1 above, and further in view of Andersen *et al.*

Kinkead *et al.* show the method as noted, including application of a granular aggregate (seed).

Claim 3 distinguishes over Kinkead *et al.* in requiring the granular aggregate to be sand. Andersen *et al.* disclose in col. 25, lines 1-7, that “Examples of useful aggregates include...sand...seeds.”

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized sand as an aggregate, as disclosed in Andersen *et al.*, in the method of Kinkead *et al.* as modified above, in place of the seed of Kinkead *et al.* for economy.

Claim 7 is rejected under 35 U.S.C. 103(a) as unpatentable over Kinkead *et al.* in view of Rogers and Strid, as applied to claim 1 above, and further in view of Japanese reference '666.

Kinkead *et al.* show the method as noted, including application of a granular aggregate (seed).

Claim 7 distinguishes over Kinkead *et al.* in requiring a mycorrhizal fungus to be applied before the application of the granular aggregate.

Japanese reference '666 discloses in lines 3-7 of the constitution thereof that "mycorrhizal fungus...are inoculated into the soil, [then] seeds of a plant such as dent corn are sowed."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied mycorrhizal fungus before planting seeds, as disclosed in Japanese '666, in the method of Kinkead *et al.* as modified by Rogers and Strid above, for greater yields.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher J. Novosad whose telephone number is 703-308-2246. The examiner can normally be reached on Monday-Thursday 5:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached at 703-308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher J. Novosad
Primary Examiner
Art Unit 3671

March 18, 2005